

### AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 16 with the following amended paragraph.

**[0016]** After injecting a predetermined volume of oxidizing gas, the coal is then ignited by any suitable method. In one method, the coal is ignited by heating the oxidizing gas above the ignition temperature for the coal which is about 1,200°F. This can be accomplished by any suitable technique, such as lowering a heating element into the borehole to heat the oxidizing gas as it enters the wellbore adjacent to the coal formation. Another method of igniting the coal, is to inject a starting fuel adjacent to the coal formation to be ignited. The starting fuel may either be a hydrocarbon containing gas or liquid, such as diesel fuel, kerosene, etc. An igniter is lowered into the wellbore adjacent to the fuel in order to ignite the fuel. Another simple ignition system would be to place an ignition source in a perforated joint of tubing with the bottom blanked off, at the bottom of tubing string positioned across the coal interval. Pumping a small amount of fuel such as diesel down the tubing, followed with a displacement plug or ball, and displacing it with air containing water mist above displacement plug or ball. Air can be continuously injected down an annulus between tubing and casing, down tubing string, or both. The ignition source can be a marine [[flair]] flare or similar device, when fuel reaches ignition source with oxygen available it will be ignited and injected into the coal interval causing the coal to become ignited.

Please replace paragraph 21 with the following amended paragraph.

**[0021]** By conducting a mass balance, one can determine from the amount of oxygen which has been injected in the coal formation the amount of coal that amount of oxygen would burn. From this information, the BTU value of the burning coal can be determined. The amount of cooling media injected to force the fire away from the borehole is an amount which is sufficient to allow the BTU balance of the burning coal to remain positive for continued burning. Preferably the cooling media injected is in a quantity sufficient to result in BTU content of the air, coal and cooling media is 60% or less than

the BTU content of the coal and air. The quantity of cooling media is more preferably from 60% to 10% of the BTU content of the air and coal without the cooling media. When the cooling media contains water it will disassociate on the side of the fire near the wellbore. The water injected into the wellbore at the area of the burning coal will disassociate, cooling the near wellbore area and forcing the fire outwards from the wellbore. On the outside edge of the fire, the water will recombine (re-associate) to produce possibly some water, carbon dioxide, carbon monoxide, methane, and some long-chain carbon molecules. Disassociation is an endothermic reaction removing heat with products traveling to the opposite side of the fire to re-combine which is an exothermic reaction, and will aid in the continued burning of the coal away from the wellbore.

Please replace paragraph 24 with the following amended paragraph.

[0024] Once the desired amount of burning has been accomplished, the fire is extinguished by stopping air injection, by providing excess water into the wellbore, or both. Simply shutting in the injection well for a period of time will suffocate the fire[[-]] also. A non-combustible gas can also be injected to assist in suffocating the fire.